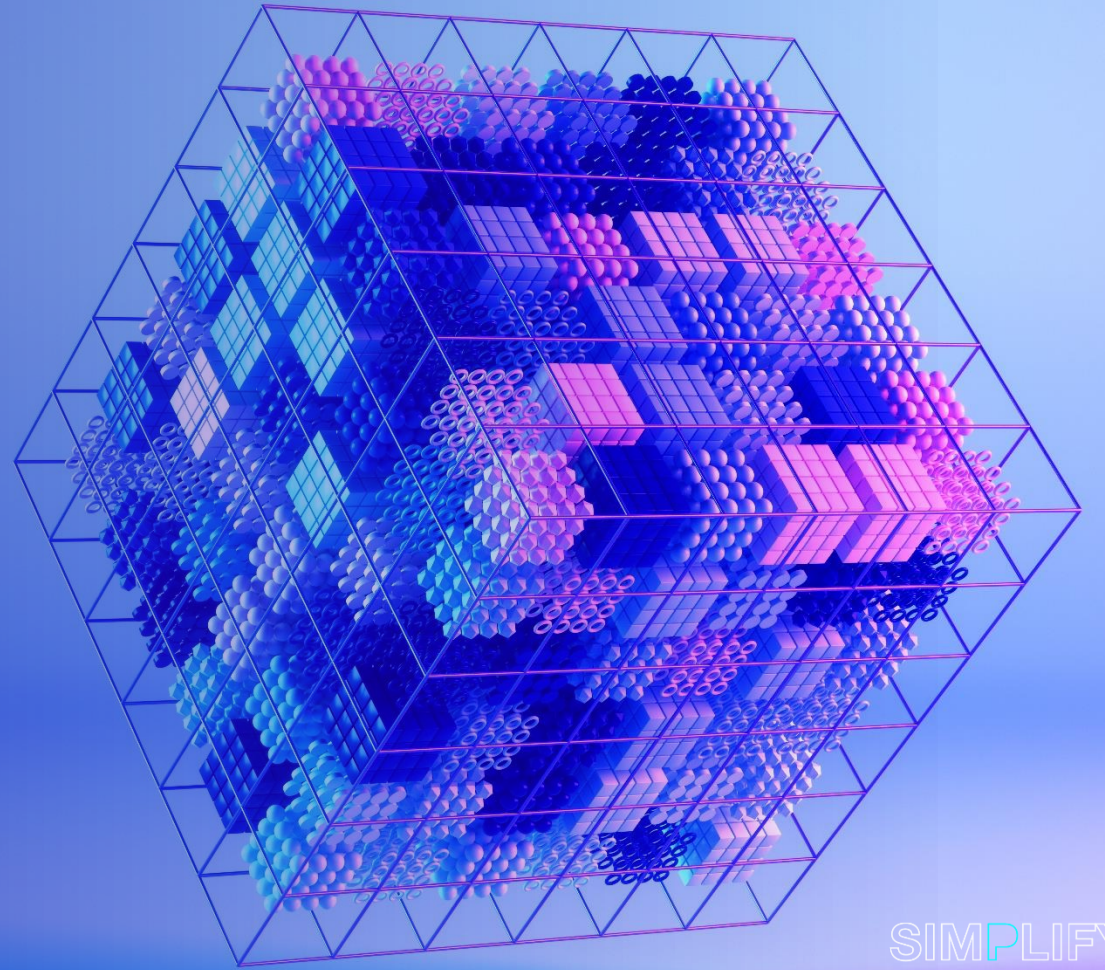


Azure Cloud – Modernization of Apps, Data, & AI....are you ready?

John Thiele – Azure Solution Sales Specialist



JuiceIT2025

SIMPLIFY
CONNECT
PROTECT



Azure in Australia – Ten Years In....

Azure in Australia – Ten Years In



Launched in late **2014**, Azure has now been a part of the Australian IT landscape for ten years.



Local Data Centres and points of presence for ExpressRoute providing low latency connectivity and supporting data sovereignty

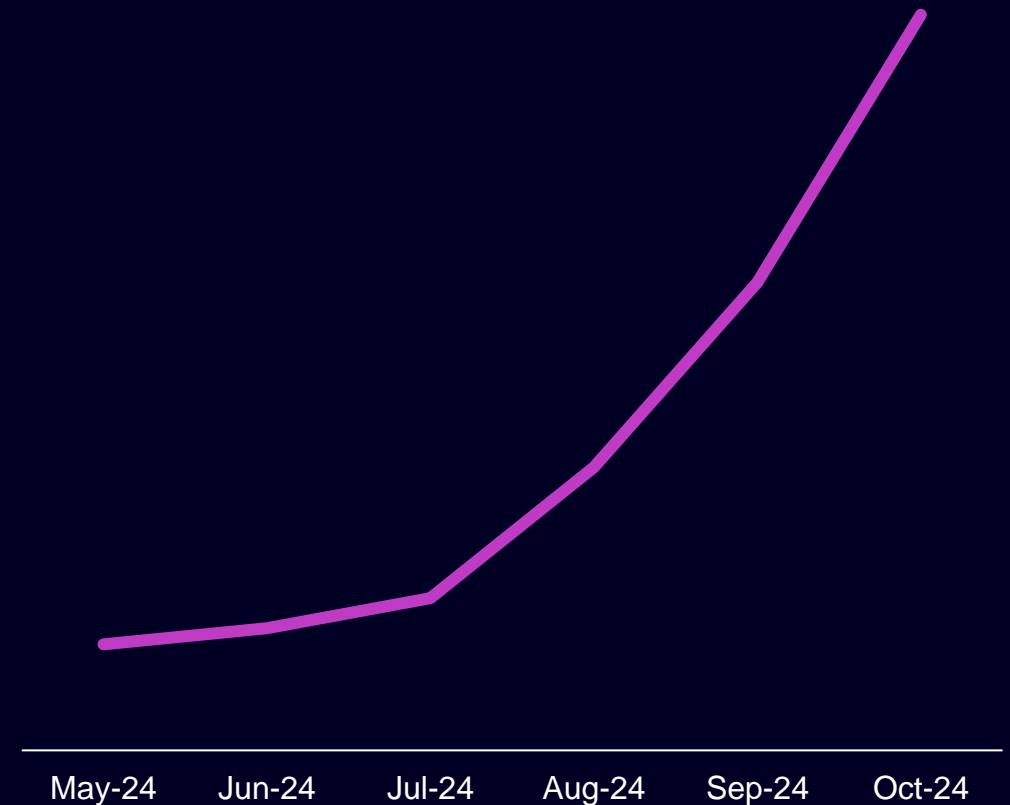


Azure services have grown to over **300** types of services, now joined by a range of cutting-edge AI services.



Azure in Australia – Continued Investment

- Microsoft is investing \$5B over this year and next year to expand its hyperscale cloud computing and AI infrastructure, increasing its computing capacity by 250%.
- Azure Extended Zone to be deployed in Perth by mid-2025.
- Addition of cutting-edge AI services / models.



Azure Open AI Service Consumption



AI-Ready Infrastructure

How do I make Azure AI-Ready?

1. "How did Microsoft get **AI Ready**?"
2. "How do I **operationalize** my AI solution?"
3. "What is the baseline **landing zone** to get the AI solution running?"
4. "How do I get my AI solution to safely access my **data** sources?"
5. "What are the **networking** requirements for my AI solution?"
6. "How do we **migrate** and **secure** our estate to enable AI at scale?"
7. "How do I **secure** my AI solution?"
8. "How do I **monitor** the cost of the AI solution?"
9. "What **policies** and **protocols** do I need to comply?"

AI-Ready Infrastructure

Landing Zone

- Enterprise Landing Zone aligned to Cloud Adoption Framework (CAF) and Well-Architected Framework (WAF).
- Segregation of resources.
- Well defined management structure and roles-based access control.

Data

- Unified, readily accessible data.
- Business continuity and data protection.
- Data security and encryption.

Network

- Well-defined virtual network topology.
- Azure network security (Firewall, DDoS, NSG's, Network Watcher).
- Private Endpoints and Private Links.
- Azure DNS, DNS Zones, and Private DNS Resolver.

Security



Defender for Cloud: secure your Azure services, threat protection for AI workloads.



Sentinel: raise AI solution security posture with SIEM, automation, and response.



Front Door Services/WAF/DDoS: leverage edge services for CDN, web-application firewall, and DDoS protection.



APIM: apply enhanced security controls for APIs.



Security Copilot: manage security posture with natural language response and threat intelligence.

Management



Azure Monitor and Log Analytics: manage with application logs, dashboard reports, monitoring, and alerting.



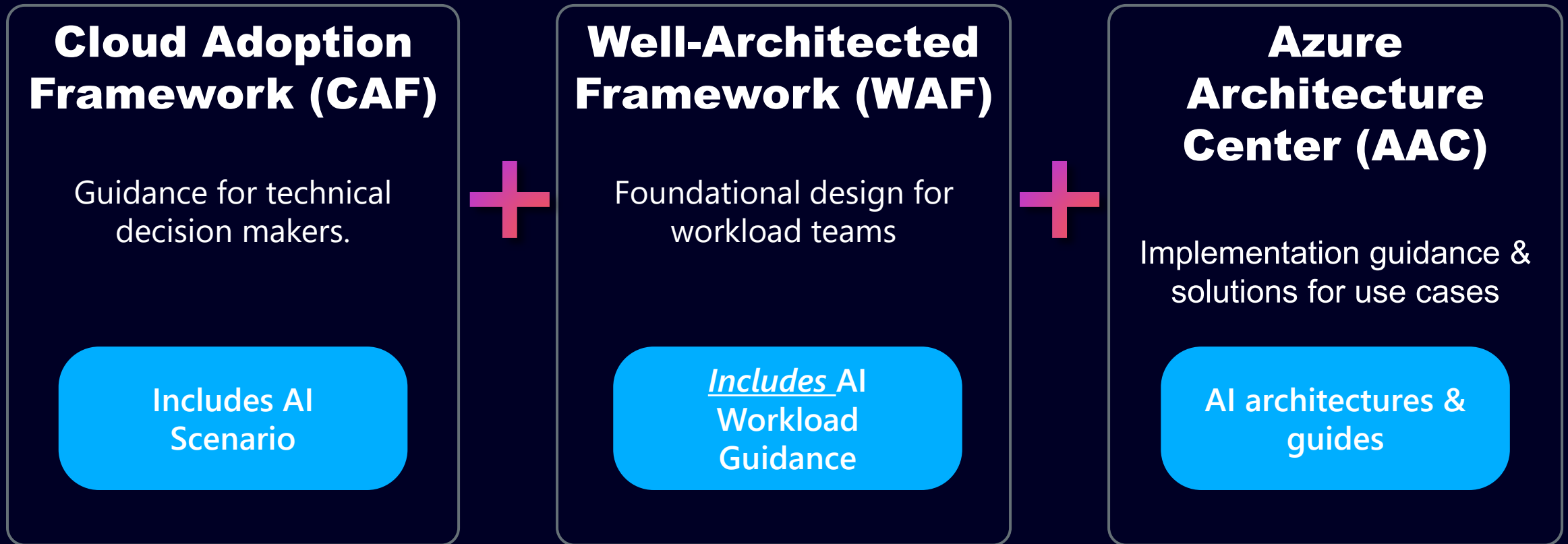
Azure Policy: use Azure Policies to audit/enforce compliance settings for applications, data, and infrastructure.



Azure Copilot: enhance management with an AI assistant that knows your environment.

Comprehensive guidance

Best practices to govern, manage, & secure AI workloads

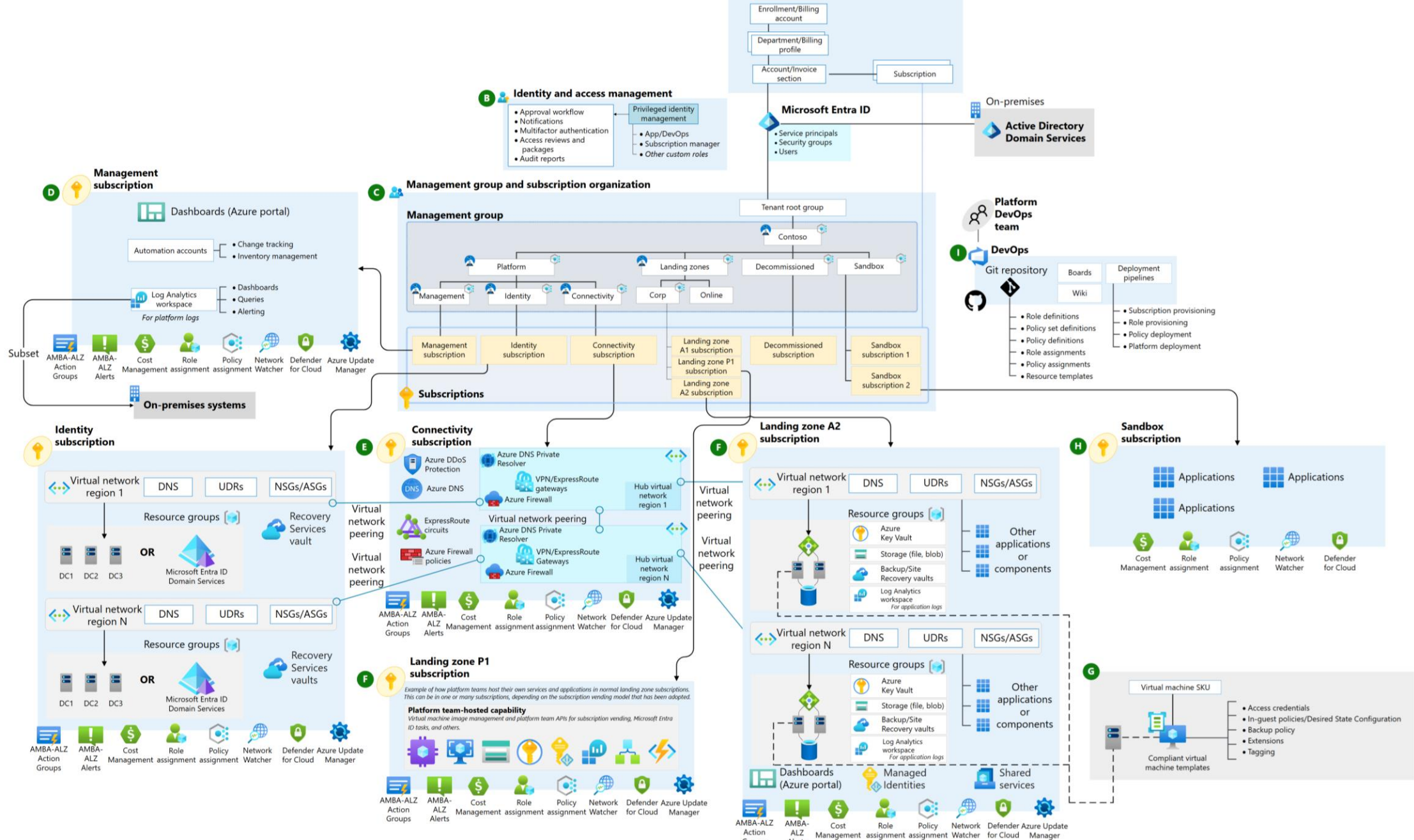


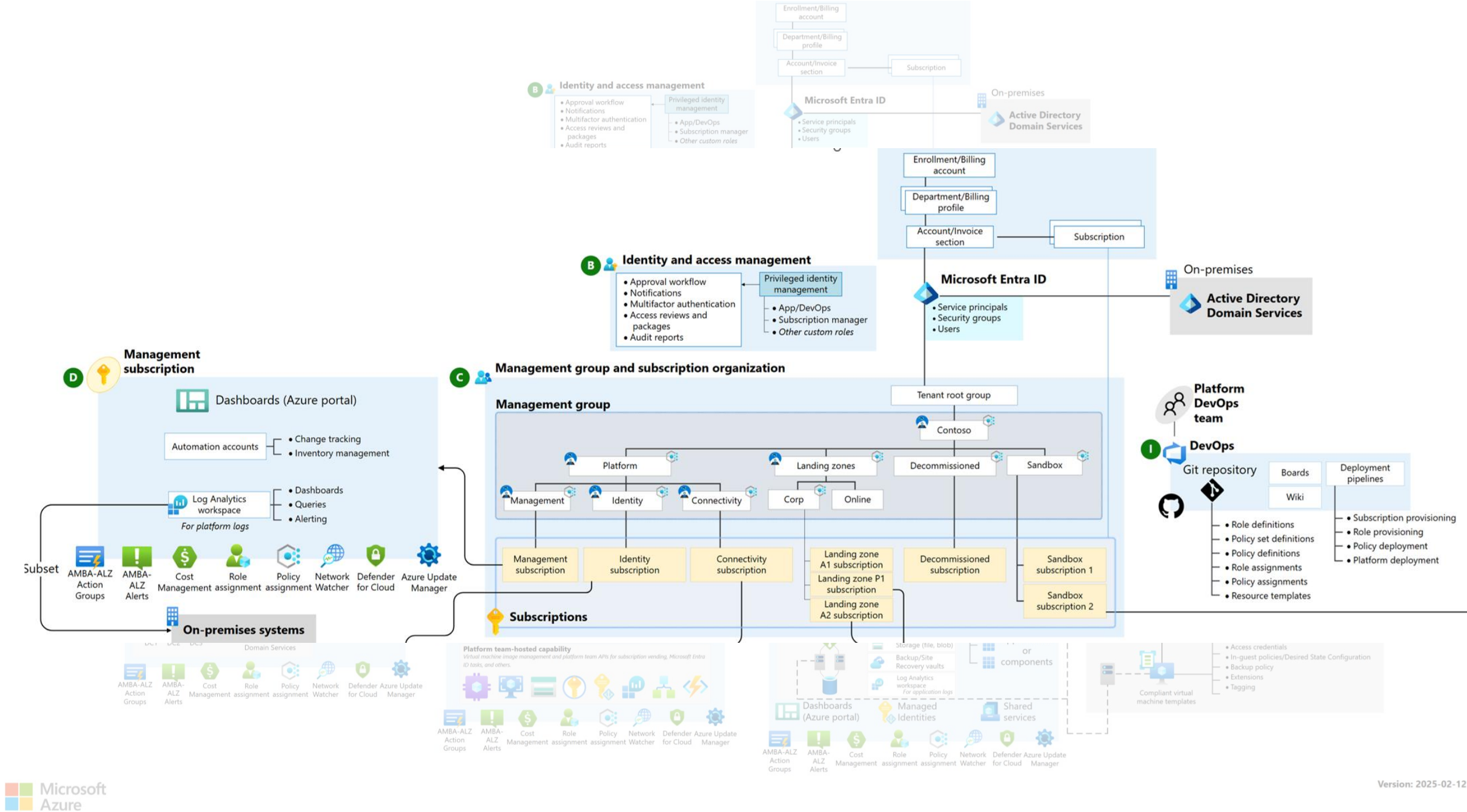


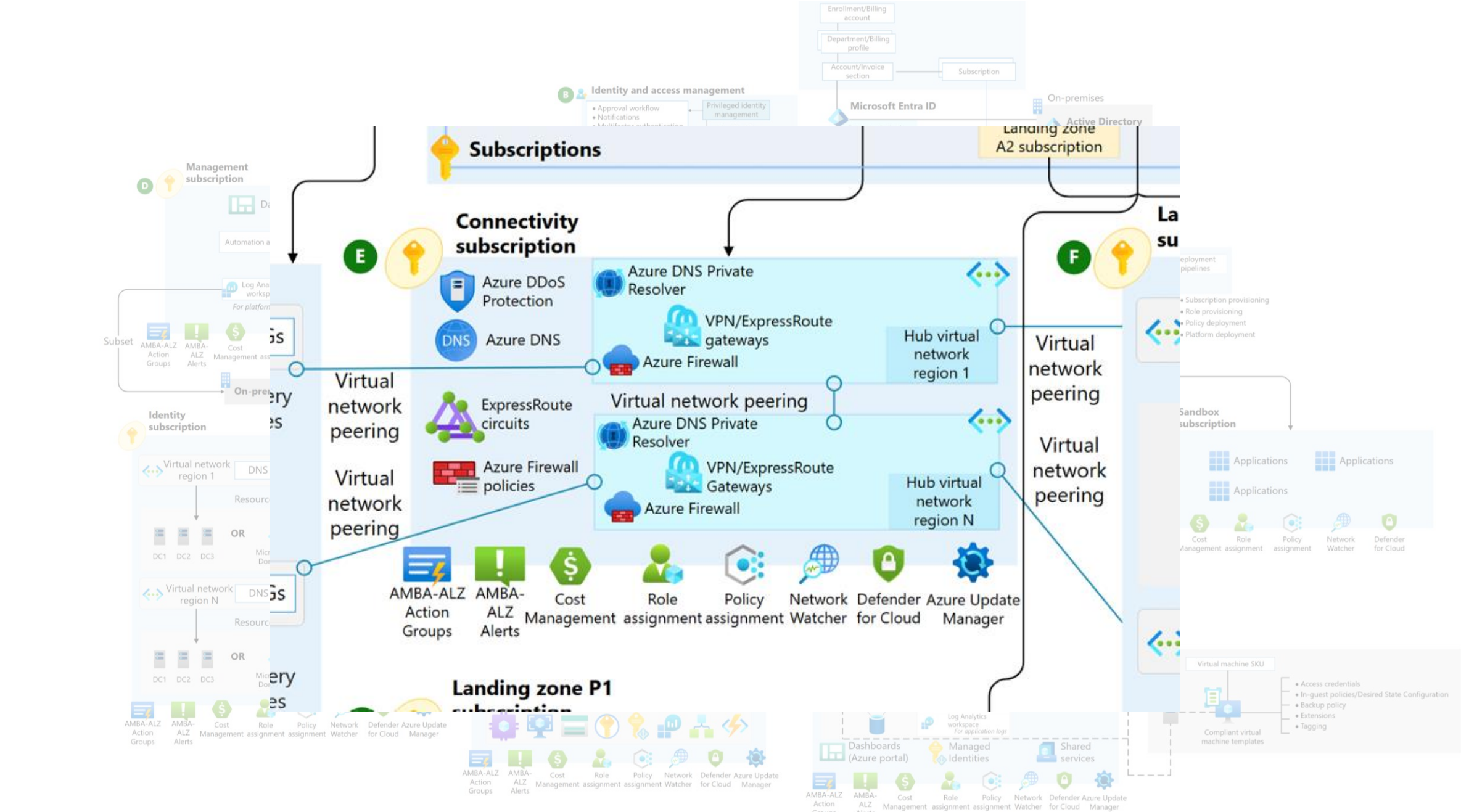
Landing Zones and Core Infrastructure

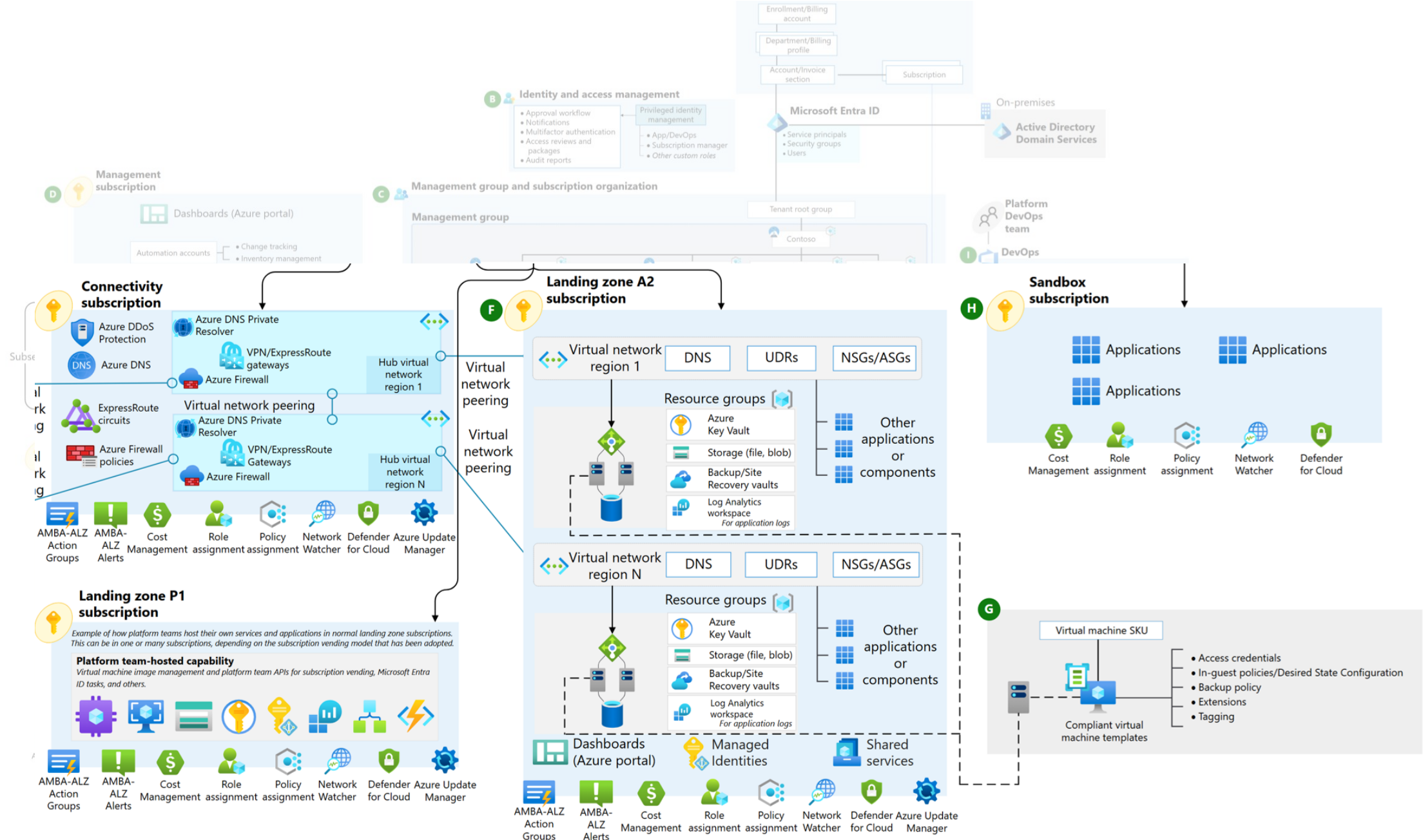
Is your existing Landing Zone aligned to CAF/WAF?

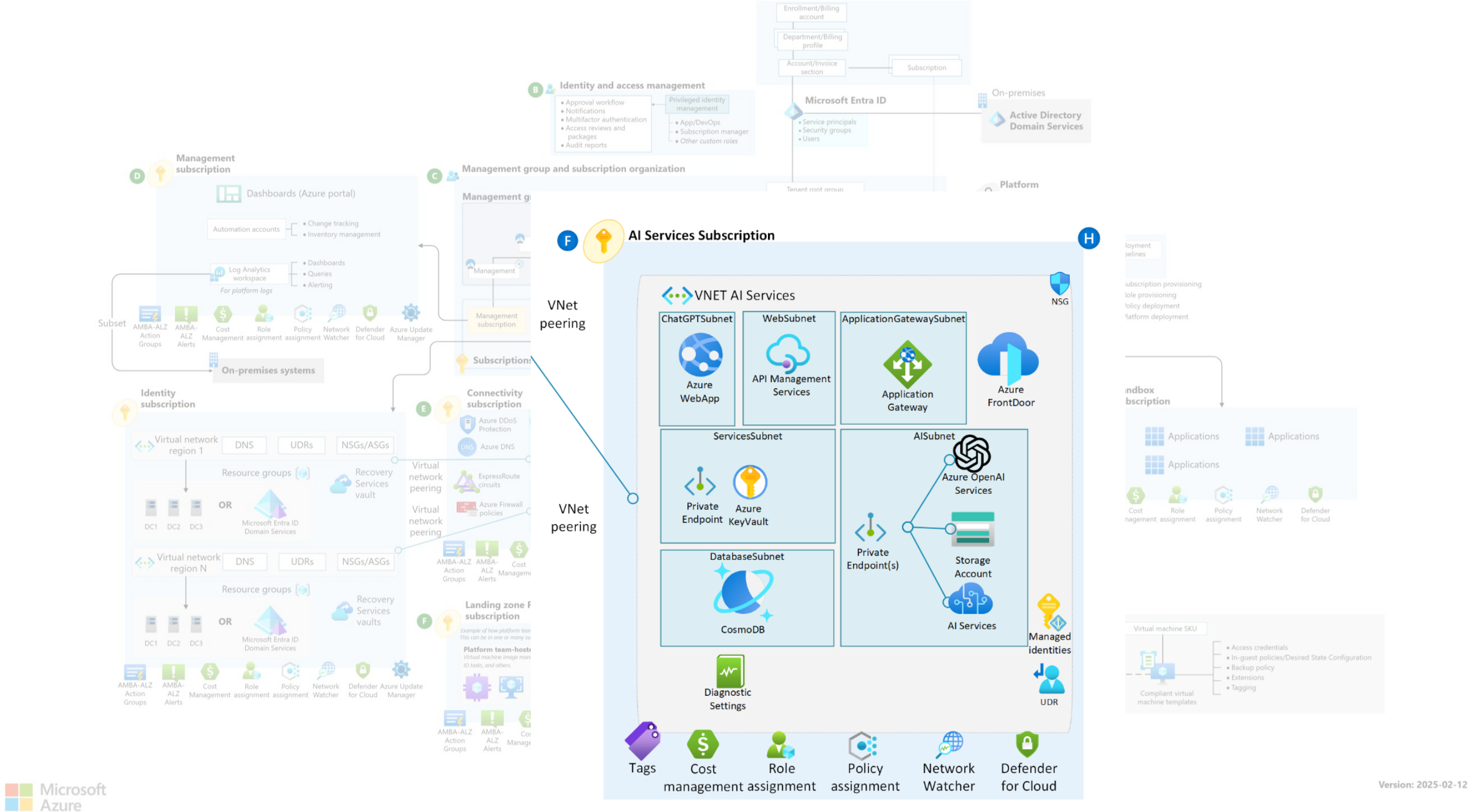
- Resource organisation? Management group structure, separation of resources in subscriptions, resource groups, naming, tagging?
- Well defined RBAC, secure access to resources?
- Network Topology? Hub and spoke, vWAN?
- Network security, firewall? Segmentation and secure network access?
- Governance? Policy, compliance, reporting?











Azure Landing Zone Deployment

- Manual
- Use of Accelerators
 - Microsoft
 - Data#3
- Infrastructure-as-code
 - Bicep
 - Terraform
- Ongoing management and deployment

Decision Point

- Deployment of **New** Azure Landing Zone (parallel to existing)
 - Design and deployment of new Azure Landing Zone aligned to CAF/WAF
 - Move of existing application subscriptions/resources under new Landing Zone
 - Inclusion of application Landing Zones / Resource Groups

vs.

- **Update** of existing Azure Landing Zone
 - Health assessment and remediation
 - Addition of application Landing Zones / Resource Groups
 - Update to network topology and addition of centralised network services



Data and Analytics – a Foundation for AI

Azure Data and Analytics Services

- Azure Database, SQL MI, SQL on VM, Azure Database or MySQL, Oracle Database, Cosmos DB, Apache Cassandra, MongoDB, PostgreSQL
- Azure Analysis Services
- Azure Data Factory
- Azure Data Explorer
- Azure Machine Learning
- Azure Synapse Analytics
- Azure Stream Analytics
- Databricks
- Data Lake
- Data Lake Analytics
- Event Hubs HDInsight
- ...Fabric
- Power-BI
- Purview
- Snowflake
-and more!

Challenges Generating Value from Data



Siloed systems, poor-quality data



Costly integration and ongoing maintenance



Technical platforms requiring advanced skills and limited resources



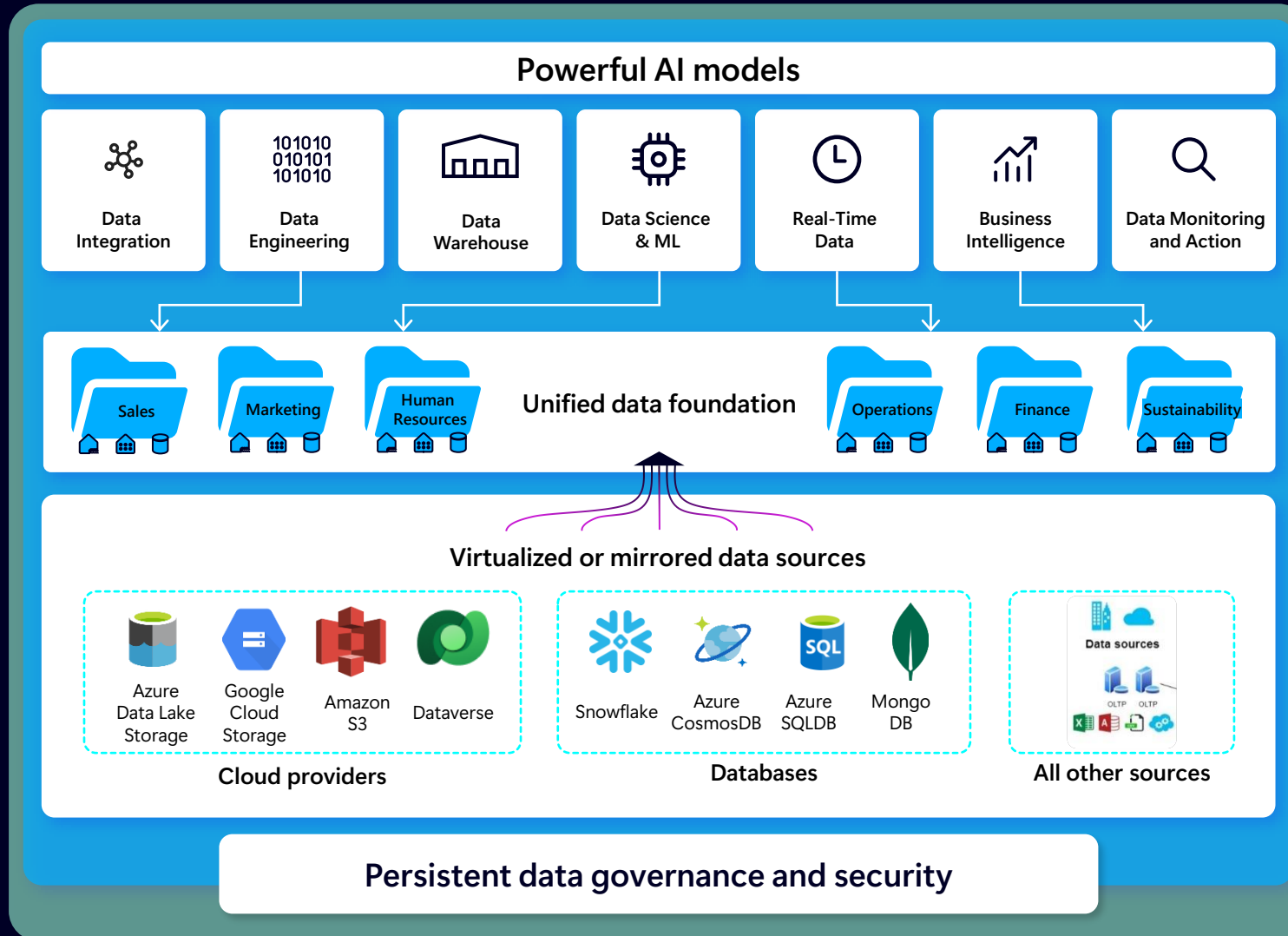
Data governance and security risks



Lagging BI and AI adoption

‘AI is only
as good
as the
data it’s
trained
on’

Unify Your Data Estate





Microsoft Fabric

The unified data platform for the era of AI



**Data
Factory**



Analytics



**Databases
(Preview)**



**Real-Time
Intelligence**



Power BI



**Partner
Workloads**



AI



OneLake



Purview



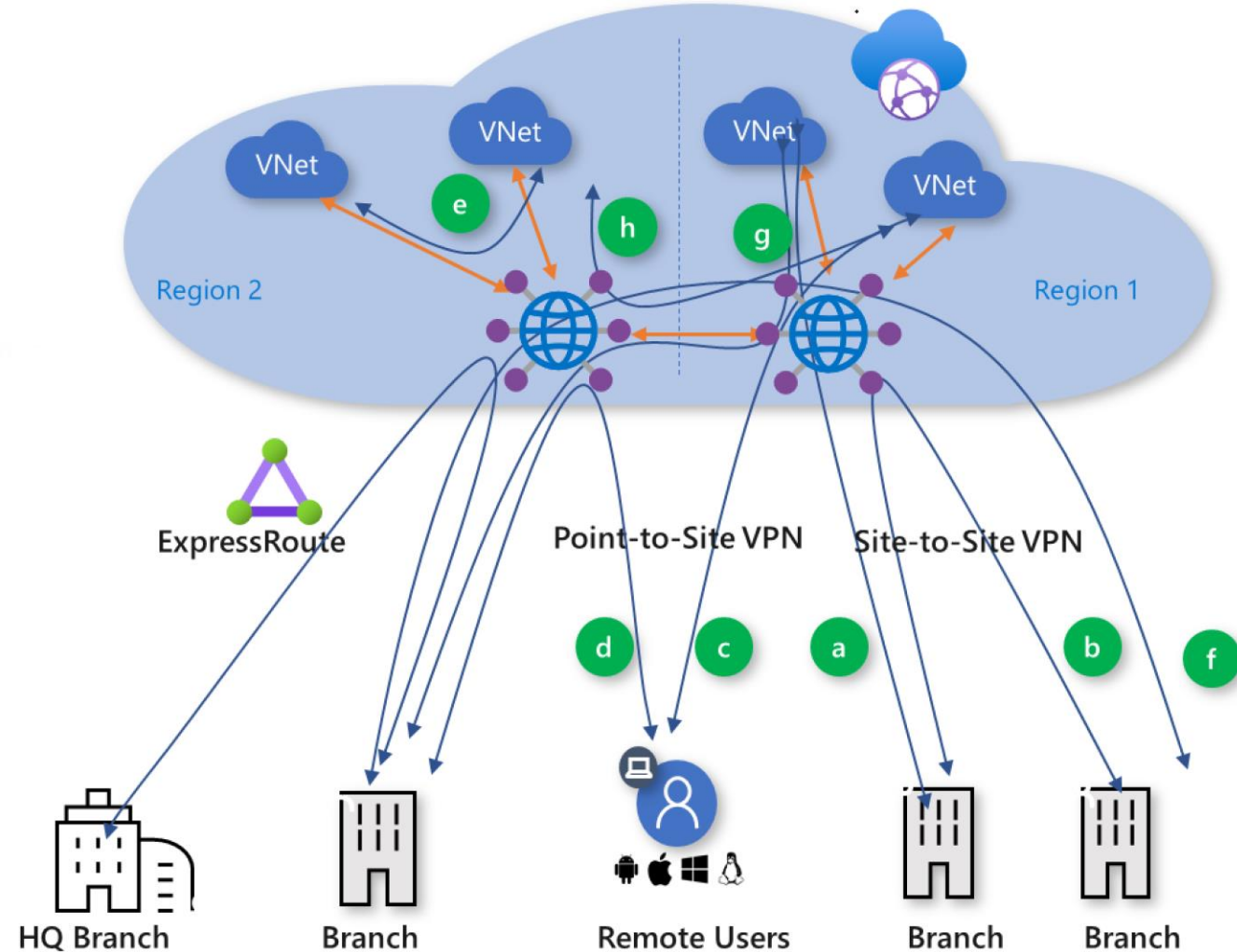
Networking

Network Considerations

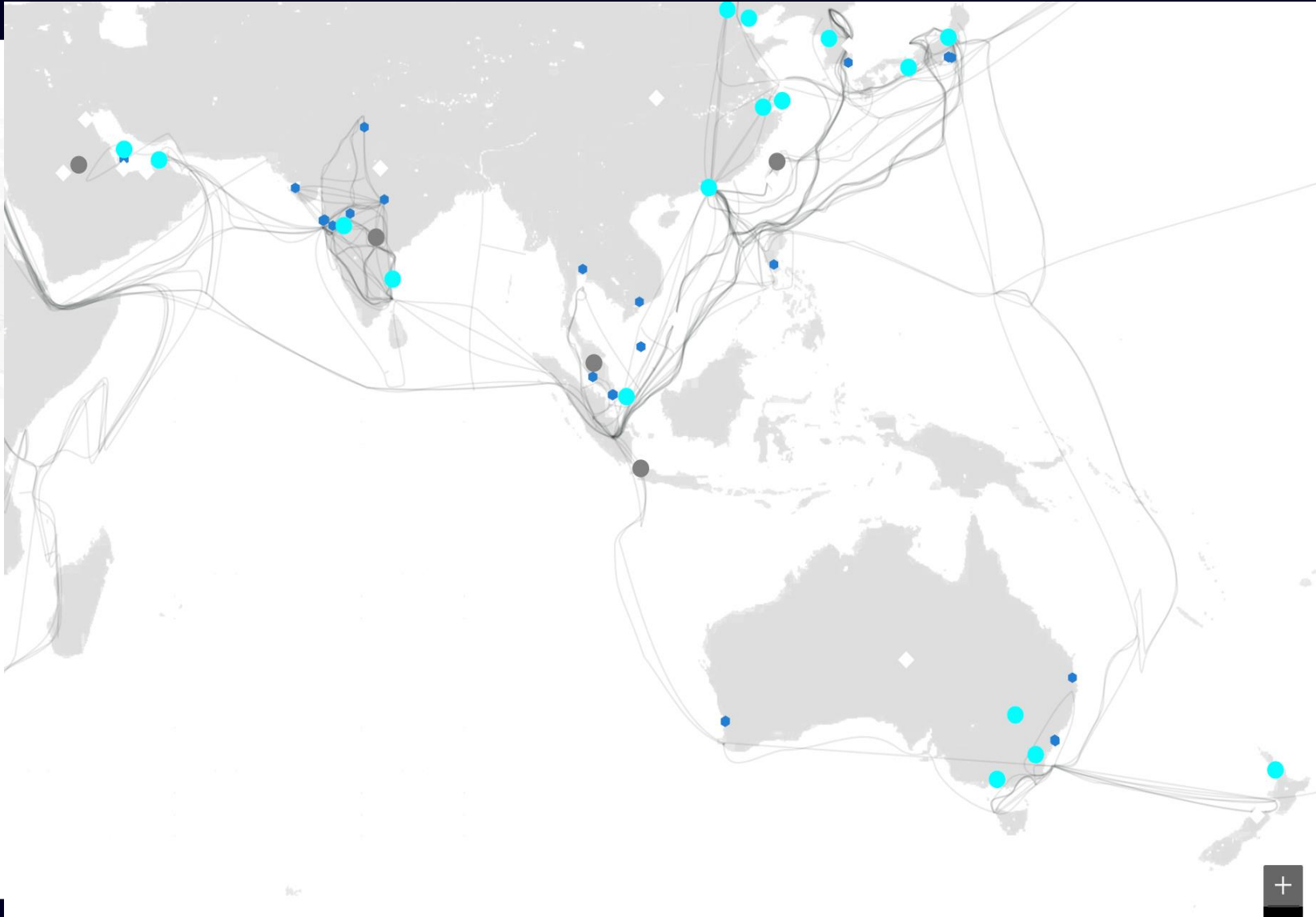
- Azure network topology
- Azure network security
 - Firewall (Azure Firewall, 3rd party firewalls)
 - NSG's
 - Azure Front Door services / Application Gateway / Web Application Firewall
 - DDoS
 - Network Watcher
- Private Endpoints and Private Links.
- Azure DNS, DNS Zones, and Private DNS Resolver.

Azure Virtual WAN (vWAN)

- Combines networking, security, and routing functionality
- Hub and spoke architecture, where spokes can include:
 - Vnets
 - ExpressRoute
 - SD-WAN
 - Site-to-Site or end-user VPN connectivity
- Enables transitive network connectivity between endpoints, leveraging global Microsoft backbone



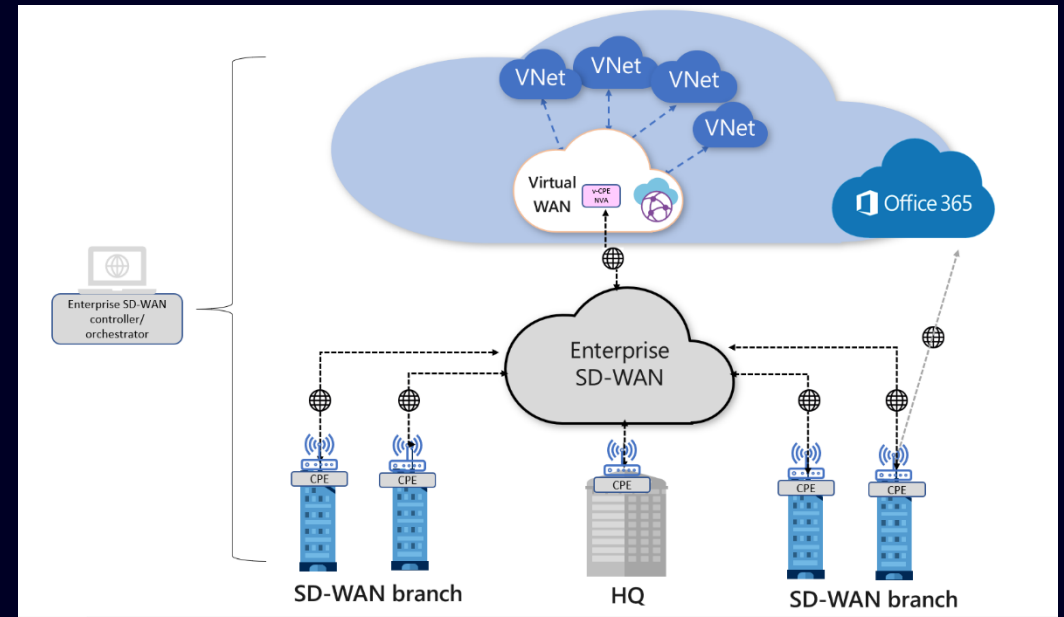
Networking – Seamless Connectivity

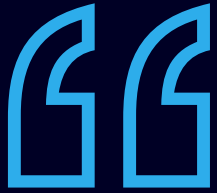


<https://datacenters.microsoft.com/globe/explore/>

Networking – the Rise of 3rd party NVA's

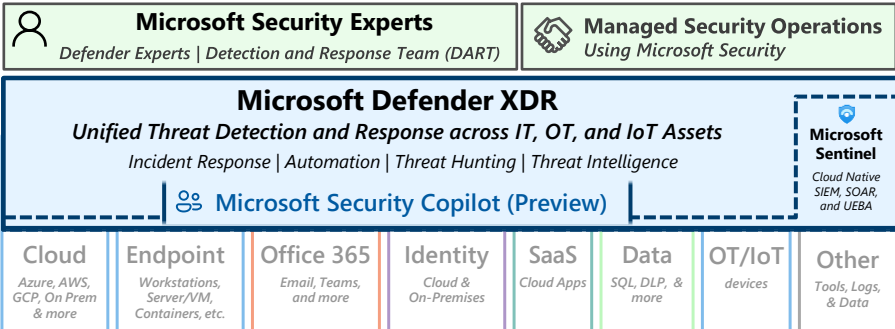
- 3rd Party Firewalls (e.g. Palo Alto NGFW)
 - Supporting centralised management of firewalls across Azure, on-premises, and other clouds
 - Can be available as a VM based appliance or PaaS service
- SD-WAN
 - Providing integration into SD-WAN (Cisco, Meraki, etc.)





Security and Compliance

Security Operations / SOC

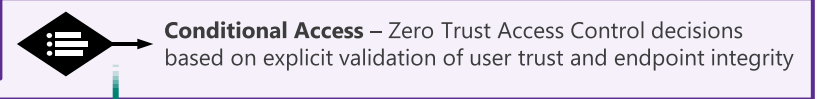


Cybersecurity Reference Architecture

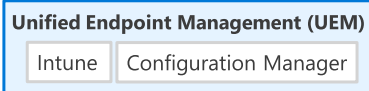
Security modernization with Zero Trust Principles

aka.ms/MCRA

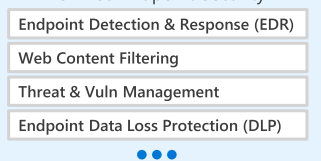
Software as a Service (SaaS)



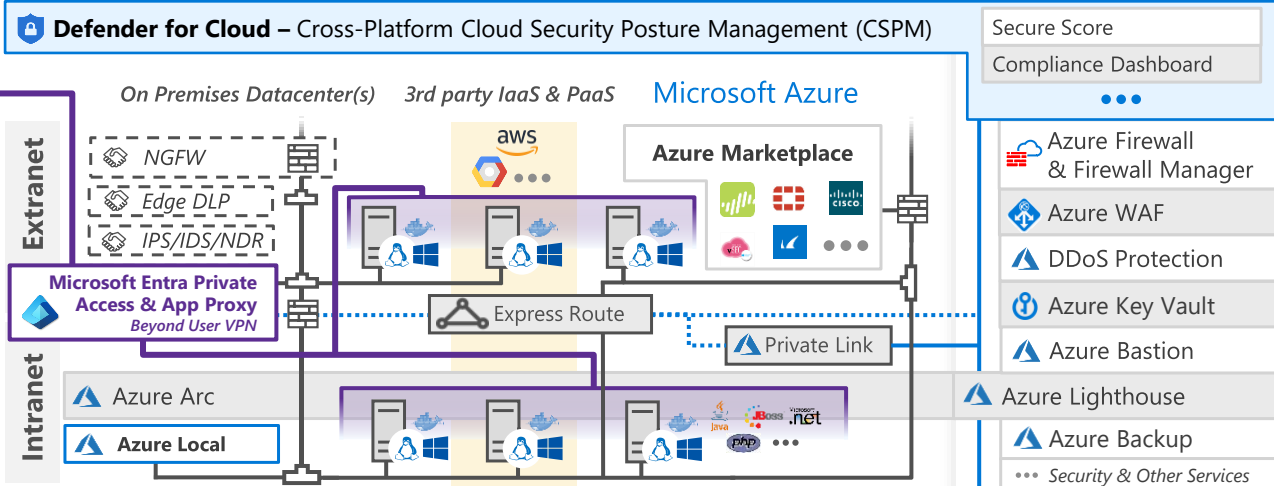
Endpoints & Devices



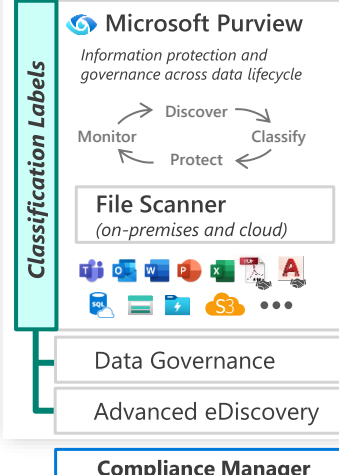
Microsoft Defender for Endpoint



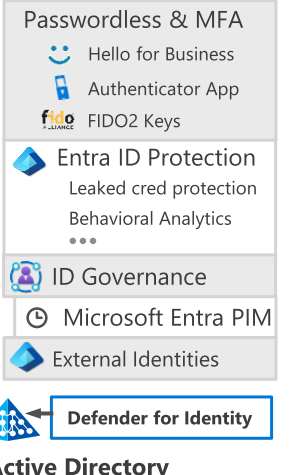
Hybrid Infrastructure – IaaS, PaaS, On-Premises



Information Protection



Microsoft Entra



Securing Privileged Access – aka.ms/SPA

Entra Permission Management – Discover and Mitigate Cloud Infrastructure Permission Creep

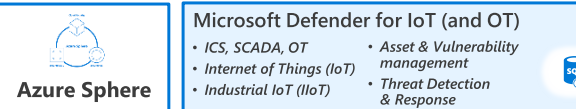
Privileged Access Workstations (PAWs) - Secure workstations for administrators, developers, and other sensitive users

Security Posture Management – Monitor and mitigate technical security risks using [Secure Score](#), [Compliance Score](#), [CSPM: Defender for Cloud](#), [Microsoft Defender External Attack Surface Management \(EASM\)](#) and [Vulnerability Management](#)

Windows 11 & 10 Security



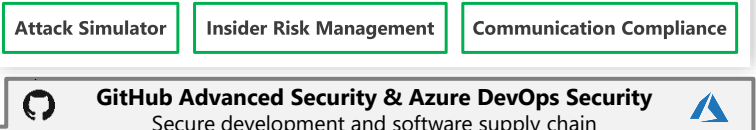
IoT and Operational Technology (OT)



Defender for Cloud – Cross-Platform, Multi-Cloud XDR



People Security



Threat Intelligence – 65+ Trillion signals per day of security context

Service Trust Portal – How Microsoft secures cloud services

Security Development Lifecycle (SDL)

JuiceIT2025

Data#3

Microsoft

Azure Security and Compliance

Secure Privileged Access



Entra ID | MFA | Conditional Access | Privileged Identity Management | Break Glass

Encryption and Keys



Encryption in transit / at rest, Key Management Services, Certificate Management, Audit Usage

Security Logging and Alerting



Azure Log Analytics, Sentinel, Defender for Cloud

Vulnerability Management



Azure Update Management, Vulnerability Assessment

Security Controls



Azure Policy, Microsoft Cloud Security Benchmark, Built-in compliance initiatives, Defender for Cloud

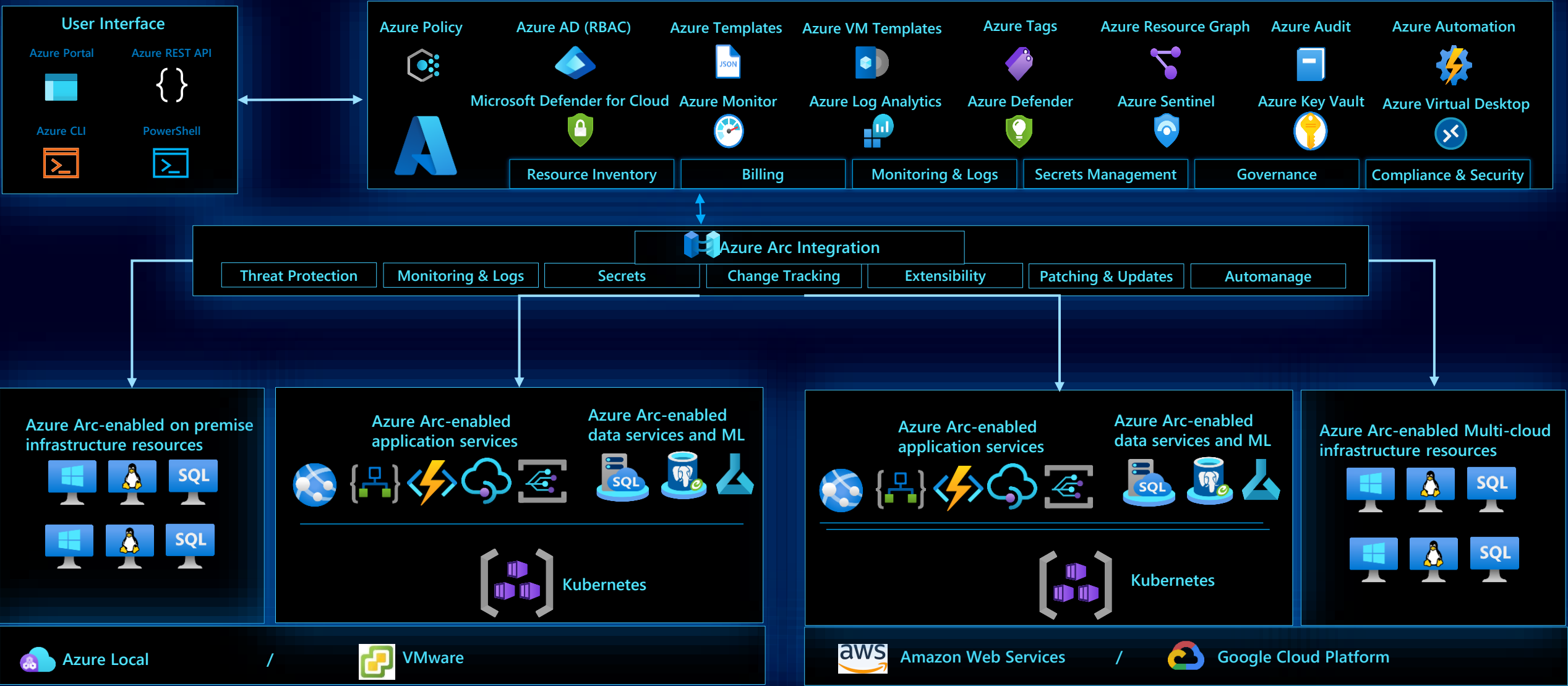
Edge and Network Security



Azure Front Door Services, App Gateway, APIM, Azure Firewall

“

Management



Optimising Investments – Cost Management





AI Applications

Azure AI Foundry



Copilot Studio



Visual Studio



GitHub



Azure AI
Foundry SDK



Model Catalog

Foundational models

Open-source models

Task models

Industry models



Azure OpenAI
Service



Azure
AI Search



Azure AI
Agent Service



Azure AI
Content Safety


Evaluations

Customization

Governance

Monitoring

Observability



[Listen to Overview](#)



Getting Started

We're here to help:

Azure Landing Zone:

- Cloud Strategy and Architecture
- Azure Foundation (Landing Zone) Deployment
- Azure Health and Governance Assessments

Data:

- Enterprise Data Strategy
- Data Planning, Capability Workshops, and Roadmaps
- Data and Analytics Design, Proof-of-Value
- Data and Analytics Platform Foundations

Security and Compliance:

- Strategy, Maturity Assessment, Data Governance, Architecture, Regulatory Compliance, Workshops
- Health Assessment
- Sentinel and Defender for Cloud Deployment
- Managed Security (Managed Firewall / Managed Sentinel / Managed XDR / SOC)

Network

- Design and deployment of virtual network topology and configuration (incl. vWAN)
- Hybrid connectivity using ExpressRoute/SDWAN/Site-to-site VPN
- Network security (Azure Firewall/NSG's/3rd party firewalls)

Management

- Design and deployment of management and monitoring services
- Azure Managed Services
- Azure Cost Management

AI

- AI Planning, Use Case Workshops, Capability Roadmaps
- AI Solution Design, Proof-of-Value, Pilot
- AI Platform Foundations

We're here to help:

Use QR Code or URL below.
Click 'Talk to Us'



<https://www.data3.com/partners/microsoft/azure/>

AI-Ready Infrastructure – Get ready!

Align
Landing
Zone to
CAF/WAF



Azure
Landing Zone

Prepare
your
data



Azure
Fabric

Extend,
segregate,
secure your
network



Azure
Network

Review
security
and
compliance



Security and
Compliance

Leverage
management
capabilities
and define
policies



Azure
Management

Start
building!



Azure AI
Applications

Data#3



data3.com



1300 23 28 23



[Linkedin.com/company/data3](https://www.linkedin.com/company/data3)



[Twitter.com/data3limited](https://twitter.com/data3limited)



[Facebook.com/data3limited](https://www.facebook.com/data3limited)



[YouTube.com/data3limited](https://www.youtube.com/data3limited)

A photograph of a modern white building with large glass windows. A large, blue, three-dimensional sign reading 'Data#3' is mounted on the upper part of the building's facade. The sky is clear and blue.

Data#3